

**ABSTRACT.****CAVITY ANTENNA EXCITED WITH ONE OR SEVERAL DIPOLES.**

5           Cavity antenna excited with one or several dipoles  
in a single piece, which has on the element that excites the  
cavity a metallic plate connected to earth and which allows  
the input impedance of the antenna to be adjusted as well as  
the reflections in the radome, by means of the adjustment of  
10 the distance with respect to the back wall of the cavity,  
avoiding through the connection to earth that the antenna  
becomes charged electrostatically. The cavity assembly and  
the metallic plate allow a broader bandwidth, moreover a  
simpler control is achieved in the adjustment of the level of  
15 crosspolar polarization, as well as of the decoupling between  
dipoles by modification in the shape of the metallic plate.  
The grouping of the antennas in an array is possible in an  
immediate manner with no need to alter the size or shape of  
the cavities or of the dipoles which excite said cavities.

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